

AMENDMENTS TO THE CLAIMS

Ok to enter 10/5/04  
RL

1. (Previously Presented) An ethylene-based copolymer [I] characterized by:

(a-1) having temperature ( $T_m$ ) at the maximum peak in the endothermic curve, measured by a differential scanning calorimeter (DSC), of 40 to 90°C,

(a-2) the copolymer comprising a component soluble in decane at normal temperature and a component insoluble in decane at normal temperature, and

(a-3) the component soluble in decane at normal temperature is present at 1 to 70% by weight and comprises (i) a recurring unit derived from ethylene and (ii) a recurring unit derived from an  $\alpha$ -olefin of 4 or more carbon atoms, and in which a content of (i) the recurring unit derived from ethylene is 50 to 75% by mole,

wherein the component insoluble at normal temperature of the ethylene-based copolymer contains a recurring unit derived from an  $\alpha$ -olefin and cyclo-olefin of 3 or more carbon atoms and a melt flow rate (at 190 °C and a load of 2.16 kg) of 0.1 to 50 g/10 min and has a temperature  $T_m$  at the maximum peak in an endothermic curve, measured by differential scanning calorimeter (DSC), is correlated with density (d) by a relationship:

$$T_m < 400 \times d - 250.$$

2. (Currently Amended) An ethylene-based copolymer **composition** [II] which comprises:

~~an ethylene-based copolymer which comprises~~ a component soluble in decane at normal temperature and a component insoluble in decane at normal temperature, which satisfies the following conditions (b-1) to (b-3):

(b-1) having temperature ( $T_m$ ) at the maximum peak in the endothermic curve of a component soluble in decane at 64°C, measured by a differential scanning calorimeter (DSC), of 40 to 90°C,

(b-2) the component soluble in decane at 64°C contains the component soluble in decane at normal temperature at 1 to 70% by weight, and

(b-3) the component soluble in decane at normal temperature comprising (i) a recurring unit derived from ethylene and (ii) a recurring unit derived from an  $\alpha$ -olefin of 4 or more carbon atoms, and in which a content of (i) the recurring unit derived from ethylene is 50 to 75% by mole,

wherein the component insoluble at normal temperature of the ethylene-based copolymer contains a recurring unit derived from an  $\alpha$ -olefin and cyclo-olefin of 3 or more carbon atoms and a melt flow rate (at 190 °C and a load of 2.16 kg) of 0.1 to 50 g/10 min and has a temperature  $T_m$  at the maximum peak in an endothermic curve, measured by differential scanning calorimeter (DSC), is correlated with density (d) by a relationship:

$$T_m < 400 \times d - 250.$$

3.-34. (Canceled)